Amendments to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application.

Listing of claims:

1.　(Currently Amended)　A programmable fixed priority and round-robin arbiter comprising:

a rotating unit which, when operating in <u>both</u> a fixed priority mode [[or]]<u>and</u> in a round-robin mode, rotates priority information related to bus masters stored in a register in a direction [[or]]<u>of</u> rotation to give the highest priority to a bus master in response to pointer information <u>which indicates the bus master currently having the highest priority, the pointer information defining the amount of rotation to be initiated by the rotating unit so that reordered priority information is available in the register</u>, and outputs <u>the reordered</u>~~changed~~ priority information;

a <u>single, common</u> request-reordering unit <u>used for operation in both the fixed priority mode and in the round-robin mode,</u> which, when a request signal is received from the bus masters, reorders requested priorities of the bus masters to be in accordance with the <u>reordered</u>~~changed~~ priority information and outputs a request-reordering signal;

a request-selecting unit which outputs a bus master-selecting signal according to priorities in response to the request-reordering signal; and

a <u>single, common</u> grant-reordering unit <u>used for operation in both the fixed priority mode and in the round-robin mode,</u> which outputs a bus master grant signal to the bus masters according to priorities in response to the bus master-selecting signal.

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2.   (Currently Amended) The programmable fixed priority and round-robin arbiter of

claim 1, wherein, when operating in the round-robin mode, the priority information is

programmed such that a higher weight in the form of increased access to a bus common to the

bus masters is given to at least one of the bus masters.

3.   (Original) The programmable fixed priority and round-robin arbiter of claim 1,

wherein the pointer information does not change in the fixed priority mode and periodically

changes in the round-robin mode.

4.   (Original) The programmable fixed priority and round-robin arbiter of claim 3,

wherein a period of the periodic change is a time period corresponding to when the bus master

grant signal of the highest priority is output.

5.   (Currently Amended) A bus control method in which an arbiter operating in a fixed

priority mode [[or]]and in a round-robin mode controls a plurality of bus masters, the bus control

method comprising:

the arbiter rotating priority information related to bus masters stored in a register to give

the highest priority to a bus master in response to pointer information which indicates the bus

master currently having the highest priority in both the fixed priority mode [[or]]and the round-

robin mode, the pointer information defining the amount of rotation to be initiated so that

reordered priority information is available in the register, and outputting the reorderedchanged

priority information;

at least one of the bus masters transmitting a request signal for occupation of a bus to the

arbiter;

the arbiter reordering requested priorities of the bus masters corresponding to the

reorderedchanged priority information in both the fixed priority mode and the round-robin mode

of operation and outputting a request-reordering signal;

the arbiter outputting a bus master-selecting signal according to priorities in response to

the request-reordering signal; and

the arbiter outputting a bus master grant signal to the bus masters in response to the bus

master-selecting signal according to priorities.

6.   (Currently Amended) The bus control method of claim 5, wherein, when operating

in the round-robin mode, the priority information is programmed such that higher weight in the

form of increased access to a bus common to the bus masters is given to at least one of the bus

masters.

7.   (Original) The bus control method of claim 5, wherein the pointer information does

not change in the fixed priority mode and periodically changes in the round-robin mode.

8. (Original) The bus control method of claim 7, wherein a period of the periodic change is the time period corresponding to when the bus master grant signal of the highest priority is output.